

REMARKSClaim Amendments

Claims 95, 97, and 101 have been amended to provide proper Markush format.

No new matter has been added.

Restriction Requirement

The Examiner has restricted the claims to one of the following twenty-seven inventions:

I-IV. therapeutic compositions wherein the compositions comprise, respectively, SEQ ID NOs: 6, 8, 10, and 16 and at least part of a sequence with an epitope in common with one of SEQ ID NOs: 6, 8, 10, or 16, classified in class 530, subclass 300 (claims 95, 96, and 101-104, in part);

V-VIII. therapeutic compositions wherein the compositions further comprise a second isolated polypeptide different from the first, having SEQ ID NOs: 2, 4, 11, or 12 or a peptide having at least a part of a sequence with an epitope in common with one of SEQ ID NOs: 2, 4, 11, or 12, classified in class 530, subclass 300 (claims 97-100, in part);

IX-XII. methods of treating with the respective therapeutic compositions of Groups I-IV, classified in class 514, subclass 2 (claim 105, in part);

XIII-XVII. methods of treating with the respective therapeutic compositions of Groups V-VIII, classified in class 514, subclass 2 (claim 106, in part);

XVIII-XXII. method of detecting sensitivity with the respective compositions of Group I-IV, classified in class 436, subclass 500 (claim 107, in part); and

XXIII-XXVII. nucleic acid compositions respectively encoding the polypeptides of Groups I-IV, classified in class 536, subclass 23.1 (claims 108-110, in part).

Specifically, the Examiner states that “[t]he products are distinct because they are comprised of unique polypeptide amino acid sequences and unique polynucleotide nucleic acid sequences which each differ in structure, function and search.” Applicants respectfully disagree and hereby elect, with traverse, the invention of Group I (SEQ ID NO:6), encompassing claims 95, 96, and 101-104.

The inventions included in Groups I-IV, or the inventions included in Groups V-VIII, do not differ in structure, function, and search. Further, all of the inventions included in Groups I-VIII are not patentably distinct. Accordingly, Applicants respectfully request reconsideration of the Examiner's restriction of the claims in the present application to the extent that the therapeutic composition claims and the isolated polypeptide claims of Group I (claims 95, 96, and 101-104 which encompass SEQ ID NO:6) should be grouped with the claims of Groups II (claims 95, 96, and 101-104 which encompass SEQ ID NO:8), III (claims 95, 96, and 101-104 which encompass SEQ ID NO:10), and IV (claims 95, 96, and 101-104 which encompass SEQ ID NO:16). Applicants also respectfully request reconsideration of the Examiner's restriction of the claims to the extent that the therapeutic composition claims of Group V (claims 97-100 which encompass SEQ ID NO: 2) should be grouped with the claims of Groups VI (claims 97-100 which encompass SEQ ID NO:4), VII (claims 97-100 which encompass SEQ ID NO:11), and VIII (claims 97-100 which encompass SEQ ID NO:12), and further to the extent that the therapeutic composition claims and the isolated polypeptide claims of Groups I-IV should be grouped with the therapeutic composition claims of Groups V-VIII.

The Compositions of Groups I-IV are not Patentably Distinct

The compositions and isolated polypeptides of Groups I, II, III, or IV are not patentably distinct since they include peptides which are similar in structure, function, and search. Specifically, SEQ ID NOs: 6, 8, 10, and 16 represent the same polypeptide, *i.e.*, the long form, the short form, the truncated form, and the naturally expressed form, respectively, of chain 2 of the TRFP protein. Therefore, the four sequences are highly identical with each other. For example, SEQ ID NO:6 (92 residues long) and SEQ ID NO:8 (90 residues long) share 85 identical residues between them.

In addition, each of the polypeptides of SEQ ID NOs: 6, 8, 10, and 16 contain several T cell epitopes of the TRFP protein. Therefore, each of the polypeptides represented by SEQ ID NOs: 6, 8, 10, and 16 shares the function of stimulating T cells

and inducing an immune response to the TRFP protein allergen, even at similar levels since they share common epitopes.

Moreover, the examination of Groups I-IV together in the present application would not place an undue burden on the Examiner, since the prior art searches for these Groups are co-extensive. For example, a prior art search of the polypeptides encompassed by Group I (SEQ ID NO:6) would necessarily include a search of the polypeptides of Groups II (SEQ ID NO:8) based on the shared structural and functional characteristics of the two polypeptides. Similarly, a prior art search of the proteins of Group I (SEQ ID NO:6) would invariably include most, if not all, of the prior art relevant to the proteins of Groups III and IV (SEQ ID NOs: 10 and 16). Indeed, each of inventions I-IV is classified within the same class and subclass. Therefore, it would not pose an undue burden on the Examiner to examine the proteins of Groups I-IV together in the present application.

Based on at least the foregoing, Groups I-IV are not patentably distinct because the polypeptides encompassed by these groups do not differ from each other in structure, function, and search.

The Compositions of Groups V-VIII are not Patentably Distinct

The compositions of Groups V-VIII are not patentably distinct since they include peptides which are similar in structure, function, and search. Specifically, SEQ ID NOs: 2, 4, 11, and 12 represent the same polypeptide. SEQ ID NOs: 2 and 4 represent chain 1 of the TRFP protein with leader A or with leader B, respectively, and SEQ ID NOs: 11 and 12 are identical to SEQ ID NOs: 2 and 4, respectively, with a single amino acid residue difference. Therefore, the four sequences are highly identical with each other.

In addition, each of the polypeptides of SEQ ID NOs: 2, 4, 11, and 12 contain several T cell epitopes of the TRFP protein. Therefore, each of the polypeptides represented by SEQ ID NOs: 2, 4, 11, and 12 shares the function of stimulating T cells and inducing an immune response to the TRFP protein allergen, even at similar levels since they share common epitopes.

Moreover, the examination of Groups V-VIII together in the present application would not place an undue burden on the Examiner, since the prior art searches for these Groups are co-extensive. For example, a prior art search of the therapeutic compositions of Group V (SEQ ID NO:2) would necessarily include a search of the proteins of Groups VII (SEQ ID NO:11) based on the shared structural and functional characteristics of the two polypeptides. Similarly, a prior art search of the proteins of Group V (SEQ ID NO:2) would invariably include most, if not all, of the prior art relevant to the proteins of Groups VI and VIII (SEQ ID NOs: 4 and 12). Indeed, each of inventions V-VIII is classified within the same class and subclass. Therefore, it would not pose an undue burden on the Examiner to examine the proteins of Groups V-VIII together in the present application.

Based on at least the foregoing, Groups V-VIII are not patentably distinct because the polypeptides encompassed by these groups do not differ from each other in structure, function, and search.

The Compositions of Groups I-VIII are not Patentably Distinct

The compositions and polypeptides of Groups I, II, III, or IV are not distinct from the compositions of Groups V, VI, VII, or VIII. The compositions of Groups V-VIII encompass the same polypeptides as Groups I-IV which, as described above, are not patentably distinct since they include peptides which are similar in structure, function, and search. Further, the addition of a second polypeptide (SEQ ID NOs: 2, 4, 11, or 12) which is selected from a group of polypeptides that are similar in structure, function, and search, as also described above, does not create patentably distinct compositions since all of the polypeptides encompassed by Groups I-VIII are similar in structure, function, and search.

The polypeptides represented by SEQ ID NOs: 6, 8, 10, 16, 2, 4, 11, and 12 are each derived from the same TRFP protein and, therefore, possess highly identical sequences among each other, as well as, similar tertiary and secondary structural characteristics. Further, these polypeptides each share the function of stimulating T cells and inducing an immune response to the TRFP protein allergen. Moreover, the

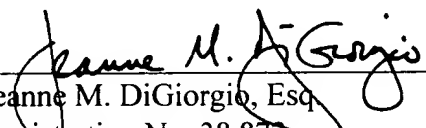
examination of Groups I-VIII together in the present application would not place an undue burden on the Examiner, since the prior art search for one polypeptide is co-extensive for each of the other polypeptides. Indeed, each of the inventions I-VIII are classified within the same class and subclass. Therefore, it would not pose an undue burden on the Examiner to examine the proteins of Groups I-VIII together.

For at least the foregoing reasons, Applicants respectfully request the Examiner to reconsider the restriction requirement made in the present application and to examine Groups I-VIII together.

If a telephone conversation with Applicants' attorney would help expedite the prosecution of the above-identified application, the Examiner is urged to call Applicants' attorney at (617) 227-7400.

Respectfully submitted,

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Version with Markings to Show Changes MadeIn the Claims:

Claims 95, 97, and 101 have been amended as follows:

95. (Amended) A therapeutic composition, comprising a first isolated polypeptide ~~that~~ selected from the group consisting of:

(a) ~~has a polypeptide comprising~~ has a polypeptide comprising an amino acid sequence set forth in ~~selected from the group consisting of~~ SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, ~~and or~~ or SEQ ID NO:16;

(b) ~~has a polypeptide comprising~~ has a polypeptide comprising at least part of a sequence as described in (a) above and has an epitope in common therewith; ~~or~~ and

(c) ~~is a modified form of a polypeptide as described in (a) or (b) above,~~ but which has at least one epitope in common therewith;

wherein said composition can be used to reduce an allergic response to a cat antigen in an individual sensitive to said antigen.

97. (Amended) A composition according to claim 95, further comprising a second isolated polypeptide that is different from the first polypeptide and ~~that~~ which is selected from the group consisting of:

(a) ~~has a polypeptide comprising~~ has a polypeptide comprising an amino acid sequence set forth in ~~selected from the group consisting of~~ SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:11, ~~and or~~ or SEQ ID NO:12;

(b) ~~has a polypeptide comprising~~ has a polypeptide comprising at least a portion of an amino acid sequence as described in (a) above and has an epitope in common therewith; ~~or~~ and

(c) ~~is a modified form of a polypeptide as described in (a) or (b) above,~~ but which has at least one epitope in common therewith.

101. (Amended) An isolated polypeptide selected from the group consisting of:

(a) ~~has~~ a polypeptide comprising an amino acid sequence set forth in ~~selected~~
~~from the group consisting of~~ SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, ~~and~~ or SEQ
ID NO:16;

(b) ~~has~~ a polypeptide comprising at least a part of a sequence as described in (a)
above and has an epitope in common therewith; ~~or~~ and

(c) ~~is~~ a modified form of a polypeptide as described in (a) or (b) above, ~~but~~ which
has at least one epitope in common therewith.